

THREE PHASE HIGH ISOLATION TRANSFORMER COPPER OR ALUMINUM WOUND, DUAL-SHIELDED COMPUTER GRADE, HIGH ISOLATION TRANSFORMER

PRODUCTION FACILITY • TESTING LAB • TELECOMMUNICATIONS
PARKS • INDUSTRIAL • GOVERNMENT • PUBLIC BUILDING • SCHOOLS
LIBRARY • AUDITORIUM • MILITARY • BANKING / CREDIT • PRINTING FACILITY

ISO-CARE
ISO-CARE PLUS
15 TO 500 KVA



Peak-Current Power Capability

Today's sophisticated systems draw alternating current in a peak, non-linear mode. During normal operation, these peaks are a result of the DC power supplies, known as switching power supplies, which repeatedly draw current to recharge their storage capacitors. Ordinary power conditioners typically have a high forward transfer impedance, which causes sine wave distortion whenever peak current is required. OnLine Power's Iso-Care has 3 to 5% (low) impedance that minimizes this distortion.

Solutions to Power Line Disturbance

Common-Mode Noise Protection

Computers using ground as a reference for logic circuits can encounter interference from common-mode noise. This type of noise is a voltage disturbance found between both current carrying leads and the common ground wire.

Transverse-Mode Noise Protection

Transverse-mode noise is not as easily eliminated as common-mode noise.

It is found between the phase and neutral input leads. Transverse voltage can be found on the secondary winding of a power transformer generated from the primary winding and coupled to the secondary. The Iso-Care provides significant transverse-mode noise attenuation by reducing the high frequency noise between the input and the output windings of the transformer.

Protection Against Electrical Noise

Electrical noise consists of spurious electrical signals which enter power lines from such sources as lightning, utility network switching and the operation of countless electrical devices.

Noise is so prevalent that it accounts for nearly 90% of all problem causing power disturbances. Noise signals can cause computing errors, printing errors, improper data transfer and damage to sensitive circuit components.

Power line noise is transmitted in two different forms. The first one known as common-mode noise, and the second one known as transverse-mode (normal-mode) noise. OnLine Power's Iso-Care and Iso-Care Plus offers protection against both types.

The **Iso-Care** utilizes two Faraday shields per phase to achieve -120 dB of common-mode noise attenuation. The isolation transformer also achieves -20 dB per decade transverse (normal) mode noise attenuation.

The **Iso-Care Plus** utilizes multi-shields per phase to achieve -126 dB of common-mode noise attenuation. An optional attenuation of -140 dB and -152 dB is available. The isolation transformer with input filter achieves -40 dB per decade transverse (normal) mode noise attenuation. With input and output filter Iso-Care Plus can achieve -60 dB per decade, transverse (normal) mode.

Power Line Disturbances

A major cause of computer malfunctions and the failure of other sensitive equipment is electrical noise. Power line disturbances occur every day. Dirty power can seriously impair the performance of sub-miniaturized systems and computer micro-circuits by causing program errors and memory loss.

UL Listed

.....
Adjustable Input Taps

.....
Single Point Grounding

.....
Temperature Sensor

.....
High Noise Immunity

.....
Optional Aluminum Transformer

.....
Common Mode Noise Attenuation Up to -152 dB

.....
Low Output Impedance

.....
Clean Noise-Free Power

.....
Indoor and Outdoor

.....
NEMA 12 Certified

.....
1 Year Warranty

ISO-CARE/PLUS SPECIFICATIONS

Sizes: 15, 30, 50, 75, 100, 125, 150, 175, 200, 225, 250, 300, 400 and 500 kVA

***Input Voltage:** 208 or 480 VAC +5%, -10% @ 2.5% Manual Taps

***Output Voltage:** 208Y/120, or 480Y/277 VAC

***Frequency:** 50 to 60 Hz, ±5%

Response Time: <200ns

Audible Noise: <35 dB measured on Response Curve "A"

Common-Mode: -120 dB (CMNA)

Normal-Mode: -20 dB/decade

Overload (Inrush): 200% of full load for 30 minutes
1000% of full load for 1 cycle

Efficiency: 96% at full loads; 98.5% at light loads typical

Load Power Factor: 0.3 leading or lagging to unity

Transformer: 3 phase dual-shielded, isolation transformer

Transformer Output Impedance: 3 to 5%

Iso-Care Plus meets all of the Iso-Care specifications.

Iso-Care Plus adds a greater level of Common-Mode Noise Attenuation.

- -126 dB CMNA (Standard)
- -140 dB CMNA (Optional)
- -152 dB CMNA (Optional)

The Iso-Care Plus is available in the same kVA range and voltages as the Iso-Care product line. Ask your local representative or consult the factory when ordering the Iso-Care Plus.

Environmental:

Operating Temperature: 32°F (0°C) to 104°F (40°C)

Operating Humidity: 5 to 95% non-condensing

Storage Temperature: 5°F (-15°C) to 122°F (50°C)

Operating Altitude: up to 10,000 ft.

* Other voltages or frequencies available - contact factory

** Specify copper or aluminum at the time of ordering.

STANDARD FEATURES

- NEMA 1 Indoor Cabinet
- NEMA 1 Indoor Cabinet
- 3 Phase Dual-Shielded, Computer Grade, Isolation Transformer
- Common-Mode Noise Attenuation (CMNA) -120 dB
- Normal-Mode Noise Attenuation -20 dB/decade

OPTIONS

- High Isolation Transformer with Harmonic Reduction (up to K-50)
- Drip Shield/Water Shield (NEMA 3R)
- Secondary Surge Suppression
- NEMA 3R, NEMA 12
- Input Filter (-40 dB/decade)
- Input/Output Filter (-60 dB/decade)
- CMNA: -140 dB and -152 dB
- Special Paint

| KVA SIZE | INPUT VOLTAGE | ISO-CARE MODEL # | | ISO-CARE PLUS MODEL # | | COPPER WGT. (LBS) | ALUMINUM WGT. (LBS) | BTUs/HR | CABINET SIZES H" x W" x D" |
|----------|---------------|------------------|--------------|-----------------------|--------------|-------------------|---------------------|---------|----------------------------|
| | | 208Y/120 OUT | 480Y/277 OUT | 208Y/120 OUT | 480Y/277 OUT | | | | |
| 15 | 208 | IC015B050013 | IC015B090013 | NR015B050013 | NR015B090013 | 300 | 230 | 2040 | 28" x 21" x 14" |
| | 480 | IC015H050013 | IC015H090013 | NR015H050013 | NR015H090013 | | | | |
| 30 | 208 | IC030B050013 | IC030B090013 | NR030B050013 | NR030B090013 | 420 | 340 | 4080 | 32" x 26.5" x 17" |
| | 480 | IC030H050013 | IC030H090013 | NR030H050013 | NR030H090013 | | | | |
| 50 | 208 | IC050B050013 | IC050B090013 | NR050B050013 | NR050B090013 | 530 | 510 | 6800 | 40.5" x 31.5" x 21.75" |
| | 480 | IC050H050013 | IC050H090013 | NR050H050013 | NR050H090013 | | | | |
| 75 | 208 | IC075B050013 | IC075B090013 | NR075B050013 | NR075B090013 | 670 | 600 | 10200 | 40.5" x 31.5" x 21.75" |
| | 480 | IC075H050013 | IC075H090013 | NR075H050013 | NR075H090013 | | | | |
| 100 | 208 | IC100B050013 | IC100B090013 | NR100B050013 | NR100B090013 | 800 | 690 | 13600 | 40.5" x 31.5" x 21.75" |
| | 480 | IC100H050013 | IC100H090013 | NR100H050013 | NR100H090013 | | | | |
| 125 | 208 | IC125B050013 | IC125B090013 | NR125B050013 | NR125B090013 | 890 | 800 | 17000 | 40.5" x 31.5" x 21.75" |
| | 480 | IC125H050013 | IC125H090013 | NR125H050013 | NR125H090013 | | | | |
| 150 | 208 | IC150B050013 | IC150B090013 | NR150B050013 | NR150B090013 | 970 | 880 | 20400 | 51.5" x 40.5" x 26.5" |
| | 480 | IC150H050013 | IC150H090013 | NR150H050013 | NR150H090013 | | | | |
| 175 | 208 | IC175B050013 | IC175B090013 | NR175B050013 | NR175B090013 | 1150 | 1050 | 23800 | 51.5" x 40.5" x 26.5" |
| | 480 | IC175H050013 | IC175H090013 | NR175H050013 | NR175H090013 | | | | |
| 200 | 208 | IC200B050013 | IC200B090013 | NR200B050013 | NR200B090013 | 1300 | 1200 | 27200 | 51.5" x 40.5" x 26.5" |
| | 480 | IC200H050013 | IC200H090013 | NR200H050013 | NR200H090013 | | | | |
| 225 | 208 | IC225B050013 | IC225B090013 | NR225B050013 | NR225B090013 | 1400 | 1300 | 30600 | 51.5" x 40.5" x 26.5" |
| | 480 | IC225H050013 | IC225H090013 | NR225H050013 | NR225H090013 | | | | |
| 250 | 208 | IC250B050013 | IC250B090013 | NR250B050013 | NR250B090013 | 1500 | 1400 | 34000 | 51.5" x 40.5" x 26.5" |
| | 480 | IC250H050013 | IC250H090013 | NR250H050013 | NR250H090013 | | | | |
| 300 | 208 | IC300B050013 | IC300B090013 | NR300B050013 | NR300B090013 | 1700 | 1600 | 40800 | 51.5" x 40.5" x 26.5" |
| | 480 | IC300H050013 | IC300H090013 | NR300H050013 | NR300H090013 | | | | |
| 400 | 208 | IC400B050013 | IC400B090013 | NR400B050013 | NR400B090013 | 2350 | 2275 | 54400 | 66" x 50.5" x 32" |
| | 480 | IC400H050013 | IC400H090013 | NR400H050013 | NR400H090013 | | | | |
| 500 | 208 | IC500B050013 | IC500B090013 | NR500B050013 | NR500B090013 | 2550 | 2475 | 68000 | 66" x 50.5" x 32" |
| | 480 | IC500H050013 | IC500H090013 | NR500H050013 | NR500H090013 | | | | |

Specifications are subject to change without prior notification.



5701 Smithway Street
Commerce, CA 90040
Phone: (800) 227-8899
Fax: (323) 721-3929
www.onlinepower.com